

CLAIMS

1. A microfilter for the removal of particles from blood or blood components comprising a porous element made of a polymeric material, characterised in that said polymeric material comprises a polyether-ester copolymer having hydrophilic and hydrophobic segments.
2. A microfilter according to claim 1, characterised in that said polymeric material is a blend comprising said polyether-ester and an aromatic polyester, preferably polybutylene terephthalate.
3. A microfilter according to claim 2, characterised in that said blend comprises up to 40% by wt. of said polyether-ester.
4. A microfilter according to any of claim 1 to 3, characterised in that said polyether-ester copolymer has hydrophobic segments of repeating units derived from an alkylene glycol and at least one aromatic dicarboxylic acid or ester thereof and hydrophilic segments derived from at least one polyalkylene oxide glycol.
5. A microfilter according to claim 4, wherein said aromatic dicarboxylic acid or ester thereof is terephthalic acid or an alkyl ester thereof.
6. A microfilter according to claims 4 or 5, wherein said alkylene glycol is selected from the group consisting of ethylene glycol, propylene glycol and butylene glycol.
7. A microfilter according to any of claims 4 to 6, wherein the polyalkylene oxide glycol is selected from the group consisting of polyethylene oxide glycol, polypropylene oxide glycol and block copolymers propylene oxide/ethylene oxide.

8. A microfilter according to any of claims 1 to 7, wherein said copolyether-ester comprises from 0.1 to 20% by wt. of polyalkylene oxide glycol.

9. A microfilter according to any of claims 1 to 8, characterised in that said porous element is made of fibres of said polymeric material.

10. A microfilter according to claim 9, wherein said porous element comprises a non-woven fabric from said polymeric material.

11. A microfilter according to any of claims 1 to 8, wherein the porous element is made of melt-blown uncoated fibres of said polyether-ester copolymer or said polymeric blend.

12. A microfilter according to any of claims 1 to 11, wherein said porous element has a CWST in the range of from 50 to 80 dynes/cm.

13. A method for removing substances from blood products comprising feeding said blood products through a microfilter according to any of claims 1 to 12.

14. A method according to claim 13 for the removal of leukocytes from blood products, selected from the group consisting of whole blood, platelet-rich plasma, packed red cells, platelet concentrate and plasma.

15. A blood purification device comprising a microfilter according to any of claims 1 to 12.

16. A blood purification device according to claim 15, consisting of a blood bag device for the separation of blood into leukocyte depleted blood components, comprising a first bag connected, in fluid flow communication, with a second bag through a leukocyte filter according to any of claims 1 to

12.

17. Fibres obtained by melt-blowing a copolyether-ester or a polymer blend comprising said copolyether-ester as defined in claims 1 to 8.